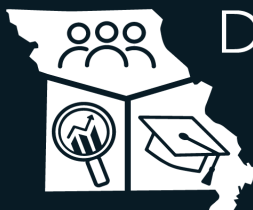
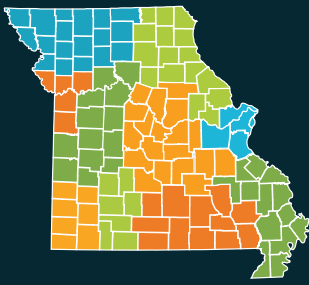


**2020**

# **CAREER GRADES REPORT**



DEPARTMENT OF  
HIGHER EDUCATION &  
WORKFORCE DEVELOPMENT



# INTRODUCTION

## MISSOURI CAREER GRADES REPORT

---

### *Career Grades are based on a combination of:*

- **Projected total job openings**
- **Projected Percent Growth**
- **Average Wage**

---

### *Now, Next, Later*

**designations refer to the amount of preparation that is needed for entry into an occupation.**

With nearly 800 occupations to consider, choosing a career can be challenging. Missouri Career Grades is a tool to help compare the future outlook of occupations in Missouri. To make the comparisons easier, letter grades, called Career Grades, are assigned to various occupations within the state based on each occupation's outlook over the next decade. Occupations in the Grade A category have the best outlook while Grade F occupations have the worst outlook. Grades are based on a combination of projected total job openings, projected percent growth, and the average wage of an occupation.

For each of these three variables, an occupation's projected performance is compared with the average for the state or region being analyzed. The degree to which an occupation is above or below the average for the three factors is used to determine its grade. Occupations with a career grade of A+ or A, have above average results in at least two of the three variables being used, and occupations receiving a grade of B+ or B have above average results in at least one of the three variables.

Career Grades are available for Missouri and the state's 10 regions, or Workforce Development Areas (WDAs). Grades assigned in each region are determined by comparing only the occupations within that region. Due to regional differences in economic makeup across the state, it is possible that an occupation can have a good outlook (and high grade) in one region, but have a poor outlook (and low grade) in another region.

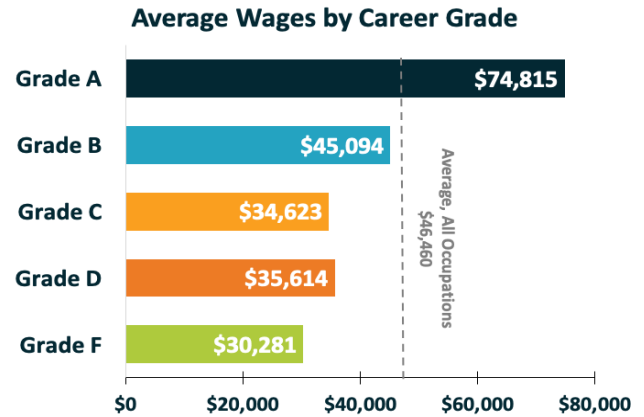
Career Grades can assist students, job seekers, displaced workers, educators, and workforce professionals in choosing which careers have the best outlook in terms of growth, job openings, and average wages.

In addition to Career Grades, Now, Next, and Later designations can also be useful to job seekers, educators, or workforce professionals. These designations refer to the amount of preparation that is needed for entry into an occupation. Now occupations require the least amount of preparation and can be entered into almost immediately, while Later occupations require the most amount of preparation, with an education requirement of at least a bachelor's degree. Individuals starting their careers may want to look at which Now occupations offer career pathways to highly graded Next or Later occupations.

# WHY DO CAREER GRADES MATTER?

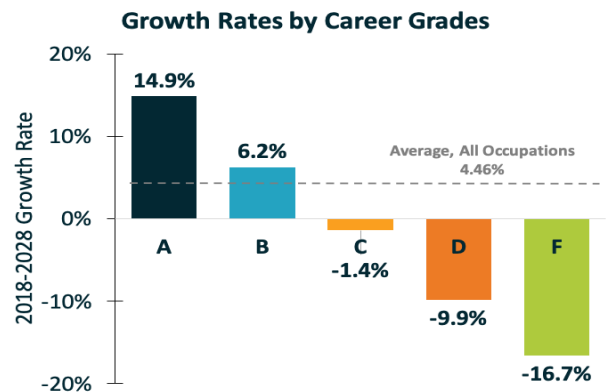
## HIGHER WAGES

While the average wage for all occupations in Missouri is \$46,460, some occupations earn substantially more or less than this amount. With average wages being one of the factors used to calculate career grades, higher graded occupations will generally earn higher wages. Grade A occupations, on average, earn an annual wage of \$74,815. This is 66 percent higher than the average wage for grade B occupations and 61 percent higher than the average wage for all occupations. Grade B occupations earn an average annual wage of \$45,094, which is 30 percent higher than the average wage for Grade C occupations.



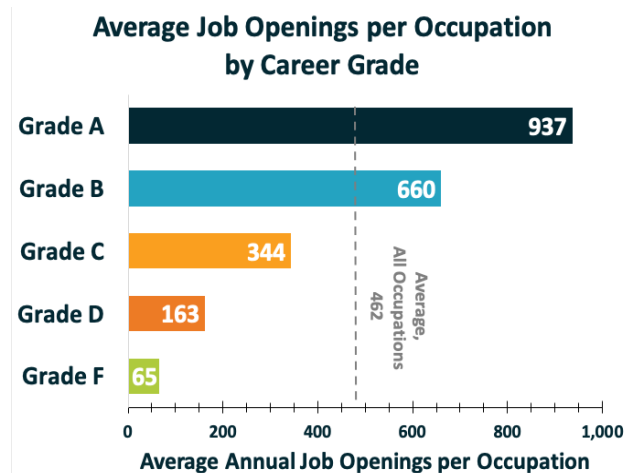
## FASTER GROWTH RATES

The average growth rate across all occupations in Missouri is 4.46 percent. However, some occupations experience growth at a faster rate than others. Grade A occupations have a projected growth rate of 14.9 percent between 2018 and 2028. Grade B occupations are projected to grow at a rate of 6.2 percent. Grade C, D, and F occupations are projected to have negative growth. The Missouri average growth rate of 4.46 percent will be used later in this report to evaluate whether individual occupations are growing faster or slower than average.

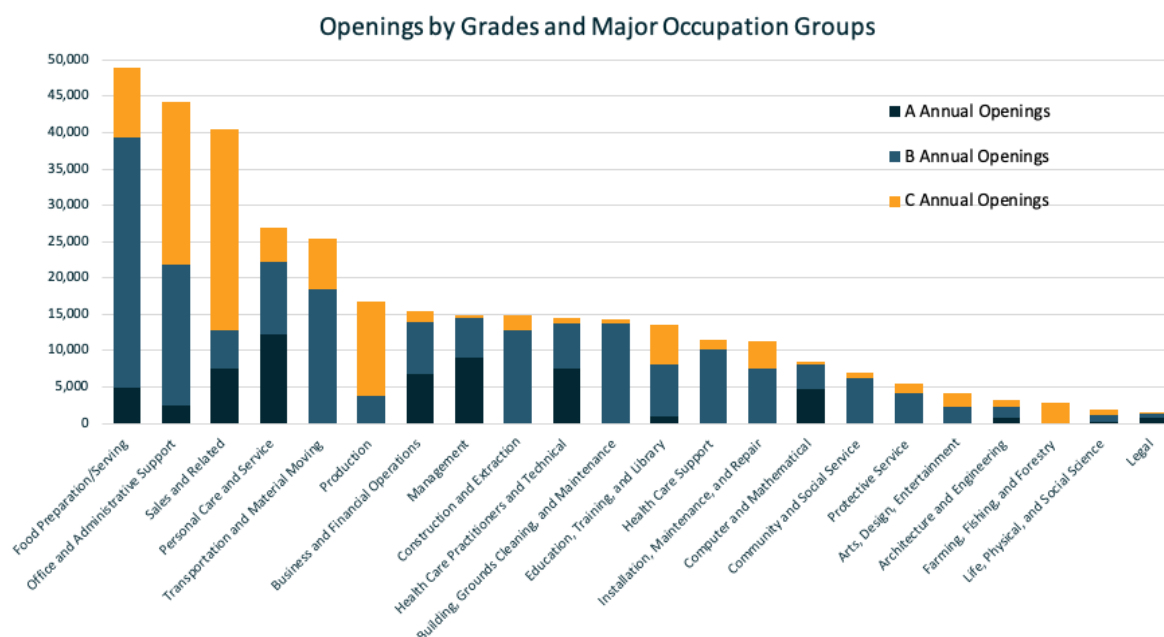


## MORE JOB OPENINGS

Job openings occur because businesses grow, and because workers move from one occupation to another or leave the workforce entirely. Grade A occupations are expected to have the most job openings per occupation between 2018 and 2028, with an average of 937 projected annual job openings for each of the 62 grade A occupations. Average openings are projected at 660 annually for each of the 277 Grade B occupations. Both grade A and B occupations are expected to have more annual job openings per occupation than the statewide average of 462.



# BY THE GRADE – JOB OPENINGS



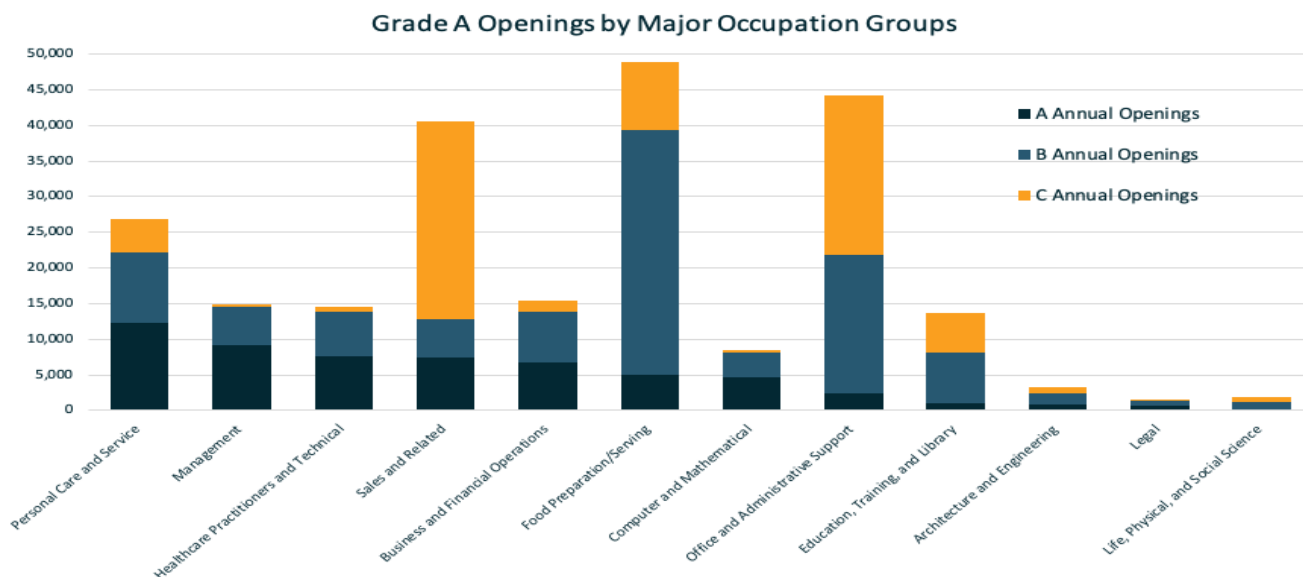
Grade A, B, and C occupations are projected to have over 347,000 job openings each year between 2018 and 2028, which represents 95 percent of the total job openings. The *Food Preparation and Serving Related* major occupation group has the most job openings in grade A, B, and C occupations, with more than 48,000 annual openings through 2028. Of those 48,000 job openings, 96 percent are due to the need to replace workers who have left for another occupation or exited the workforce completely.

The major occupation group of *Office and Administrative Support* is projected to have the next most job openings in grade A, B, and C occupations with more than 44,000 openings. The *Personal Care and Service* major occupation group has a very high growth rate of over 17 percent and is projected to have more than 26,000 grade A, B and C annual job openings.

## Major Occupation Groups with Most Grade A, B, and C Openings

Major Occupation Group	2018 Employment	2028 Employment	Net Change	Percent Growth	Annual Openings
Food Preparation/Serving	261,395	282,734	21,339	8.2%	48,870
Office and Administrative Support	384,404	379,443	-4,961	-1.3%	44,198
Sales and Related	290,277	289,460	-817	-0.3%	40,543
Personal Care and Service	149,988	175,918	25,930	17.3%	26,876
Transportation and Material Moving	193,978	203,566	9,588	4.9%	25,483
Production	148,753	145,730	-3,023	-2.0%	16,751
Business and Financial Operations	152,426	160,498	8,072	5.3%	15,482
Management	160,541	169,788	9,247	5.8%	14,889
Construction and Extraction	124,134	131,995	7,861	6.3%	14,842
Health Care Practitioners and Technical	197,670	224,321	26,651	13.5%	14,597

# GRADE A OPENINGS

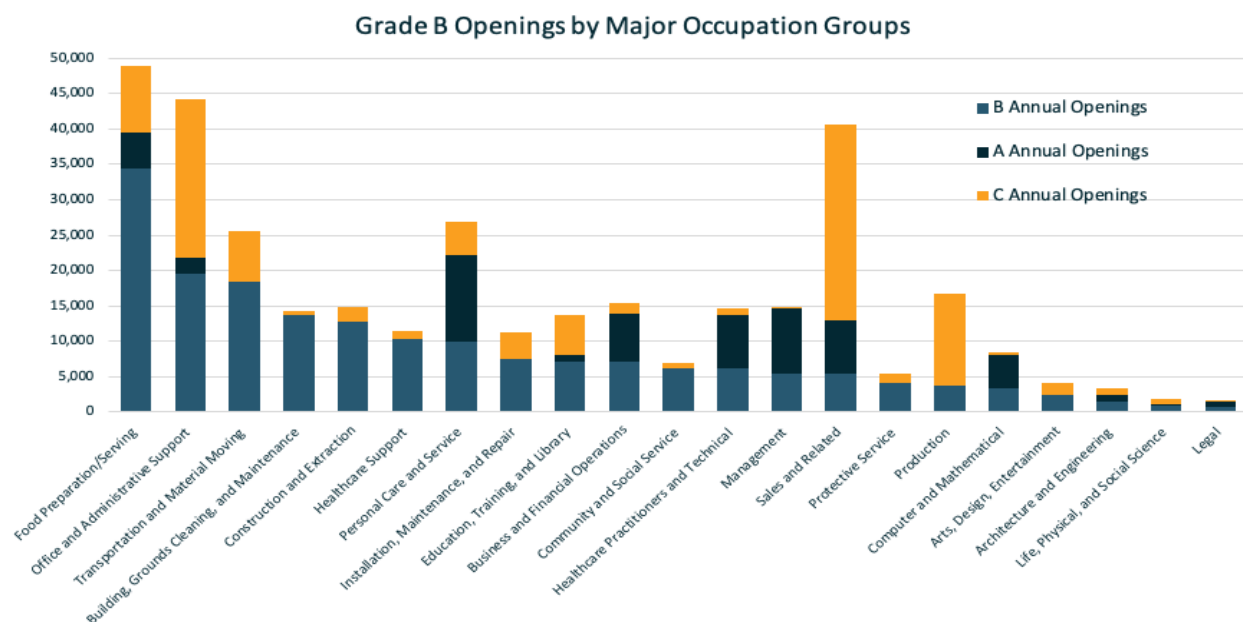


Grade A occupations are projected to have more than 58,000 annual job openings between 2018 and 2028. These openings are spread across 12 of the 22 major occupation groups. *Personal Care and Service* occupations are expected to have the most Grade A job openings with more than 12,000 annual openings projected through 2028. In addition to having a large number of job openings, Grade A *Personal Care and Service* occupations are also expected to have a fast growth rate of 33 percent between 2018 and 2028. The *Management* major occupation group has the highest concentration of Grade A jobs, with 61 percent of its projected openings coming from Grade A occupations. The *Education, Training, and Library* major occupation group is projected to have the second fastest growth rate in Grade A occupations, at 20 percent.

## Major Occupation Groups with Most Grade A Openings

Major Occupation Group	2018 Grade A Employment	2028 Grade A Employment	Grade A Net Change	Grade A Percent Growth	Grade A Annual Openings
Personal Care and Service	62,505	83,158	20,653	33.0%	12,217
Management	96,885	104,690	7,805	8.1%	9,140
Health Care Practitioners and Technical	106,733	124,637	17,904	16.8%	7,605
Sales and Related	62,014	66,111	4,097	6.6%	7,463
Business and Financial Operations	62,937	68,105	5,168	8.2%	6,780
Food Preparation/Serving	28,891	34,150	5,259	18.2%	4,985
Computer and Mathematical	48,832	58,214	9,382	19.2%	4,737
Office and Administrative Support	17,356	20,338	2,982	17.2%	2,408
Education, Training, and Library	8,446	10,133	1,687	20.0%	938
Architecture and Engineering	10,281	11,279	998	9.7%	825

# GRADE B OPENINGS

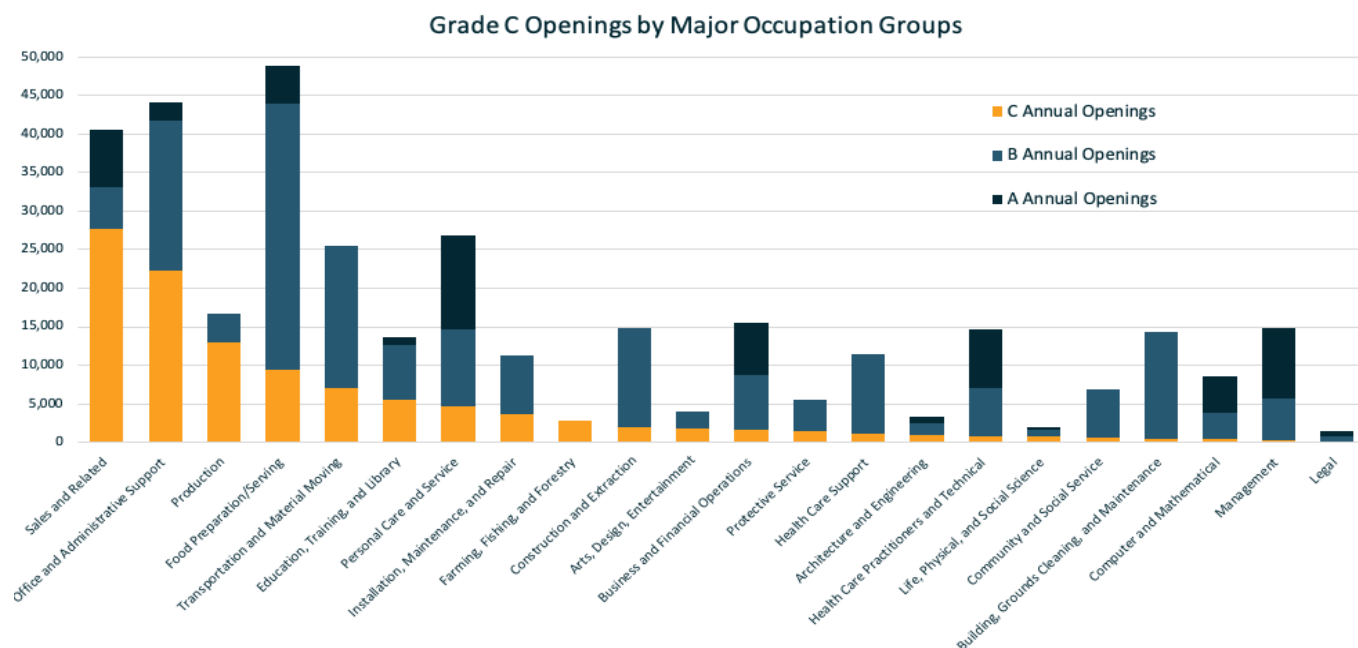


Grade B occupations are projected to have almost 181,000 job openings each year between 2018 and 2028. This represents about half of all job openings across all occupations. *Food Preparation and Serving Related* occupations are expected to have the most job openings in Grade B occupations, with more than 34,400 job openings projected each year through 2028. *Building, Grounds Cleaning, and Maintenance* is projected to have 97 percent of its openings from 2018 to 2028 coming from Grade B occupations. The *Office and Administrative Support* major occupation group is expected to have the second most Grade B jobs, with almost 19,500 projected annual job openings. Grade B occupations in the *Health Care Support* major occupation group are projected to experience very fast growth, at 13.9 percent.

## Major Occupation Groups with Most Grade B Openings

Major Occupation Group	2018 Grade B Employment	2028 Grade B Employment	Grade B Net Change	Grade B Percent Growth	Grade B Annual Openings
Food Preparation/Serving	174,041	190,439	16,398	9.4%	34,431
Office and Administrative Support	152,007	155,828	3,821	2.5%	19,494
Transportation and Material Moving	140,501	149,265	8,764	6.2%	18,457
Building, Grounds Cleaning, and Maintenance	98,619	103,698	5,079	5.2%	13,772
Construction and Extraction	107,685	114,987	7,302	6.8%	12,847
Health Care Support	76,740	87,392	10,652	13.9%	10,257
Personal Care and Service	59,645	63,336	3,691	6.2%	10,011
Installation, Maintenance, and Repair	74,784	77,603	2,819	3.8%	7,604
Education, Training, and Library	85,668	88,866	3,198	3.7%	7,214
Business and Financial Operations	72,822	76,279	3,457	4.7%	7,090

# GRADE C OPENINGS



Grade C occupations account for 30 percent of total openings between 2018 and 2028, with more than 108,000 job openings projected each year over that time frame. *Sales and Related* occupations are expected to have the most Grade C job openings with more than 27,600 projected openings each year through 2028. Grade C job openings account for 90 percent of projected total openings in *Farming, Fishing, and Forestry* occupations. The *Office and Administrative Support* major occupation group is expected to have the second most grade C jobs, with almost 22,300 projected annual job openings. With a projected growth rate of 5.7 percent, Grade C occupations in the *Personal Care and Service* major occupation group are expected to experience faster than average growth between 2018 and 2028.

## Major Occupation Groups with Most Grade C Openings

Major Occupation Group	2018 Grade C Employment	2028 Grade C Employment	Grade C Net Change	Grade C Percent Growth	Grade C Annual Openings
Sales and Related	175,543	170,709	-4,834	-2.8%	27,660
Office and Administrative Support	215,041	203,277	-11,764	-5.5%	22,296
Production	117,211	113,081	-4,130	-3.5%	12,981
Food Preparation/Serving	58,463	58,145	-318	-0.5%	9,454
Transportation and Material Moving	53,477	54,301	824	1.5%	7,026
Education, Training, and Library	52,551	53,934	1,383	2.6%	5,488
Personal Care and Service	27,838	29,424	1,586	5.7%	4,648
Installation, Maintenance, and Repair	35,135	36,528	1,393	4.0%	3,677
Farming, Fishing, and Forestry	16,774	17,076	302	1.8%	2,787
Construction and Extraction	16,449	17,008	559	3.4%	1,995

# By the Grade – Top Jobs

## Grade A Occupations

Prep Needed	Title	Annual Openings	2018-2028 Growth Rate	Average Wages
NOW	Personal Care Aides	12,217	33.0%	\$23,020
LATER	Registered Nurses 🔥	5,525	16.2%	\$65,130
NEXT	Cooks, Restaurant 🔥	4,985	18.2%	\$25,180
LATER	General and Operations Managers 🔥	4,613	6.2%	\$105,280
NEXT	Sales Representatives, Wholesale and Manufacturing 🔥	2,913	4.9%	\$65,640
LATER	Accountants and Auditors 🔥	2,866	4.9%	\$70,240
NEXT	Sales Representatives, Services, All Other	2,611	6.2%	\$54,920
NEXT	Medical Secretaries	2,408	17.2%	\$34,270
LATER	Software Developers, Applications 🔥	1,710	26.9%	\$93,880
LATER	Business Operations Specialists, All Other	1,585	6.7%	\$73,500

## Grade B Occupations

Prep Needed	Title	Annual Openings	2018-2028 Growth Rate	Average Wages
NOW	Combined Food Preparation and Serving Workers 🔥	15,919	14.6%	\$21,110
NOW	Waiters and Waitresses 🔥	9,479	3.0%	\$21,420
NOW	Laborers and Freight, Stock, and Material Movers 🔥	6,985	5.3%	\$31,360
NOW	Customer Service Representatives 🔥	6,723	0.3%	\$35,020
NOW	Janitors and Cleaners 🔥	6,129	6.1%	\$27,470
NEXT	Heavy and Tractor-Trailer Truck Drivers 🔥	5,871	4.7%	\$45,070
NOW	Stock Clerks and Order Fillers 🔥	5,226	3.0%	\$27,320
NEXT	Nursing Assistants 🔥	5,176	9.0%	\$25,930
NOW	Childcare Workers	4,382	4.8%	\$23,490
NOW	Maids and Housekeeping Cleaners 🔥	3,720	0.7%	\$22,640

## Grade C Occupations

Prep Needed	Title	Annual Openings	2018-2028 Growth Rate	Average Wages
NOW	Cashiers 🔥	13,768	-2.0%	\$22,050
NOW	Retail Salespersons 🔥	11,574	-4.1%	\$28,030
NEXT	Secretaries and Administrative Assistants 🔥	7,069	-9.8%	\$35,010
NOW	Office Clerks, General	4,951	-4.3%	\$32,600
NEXT	Bookkeeping, Accounting, and Auditing Clerks 🔥	3,565	-4.6%	\$38,340
NEXT	Assemblers and Fabricators, All Other, Including Team Assemblers	2,394	-14.7%	\$37,350
NEXT	Teacher Assistants	2,106	2.3%	\$27,220
NOW	Bartenders	2,089	2.1%	\$26,480
NOW	Cooks, Institution and Cafeteria	2,059	-0.4%	\$24,900
NOW	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1,699	0.9%	\$21,300



## BY THE GRADE – EDUCATION/SKILL LEVEL

Occupations can be further divided into Now, Next, and Later categories, based on the preparation often required to enter into an occupation. Now occupations offer the most immediate employment opportunities and can generally be entered into with little to no preparation. Next occupations require further preparation, like an associate degree, apprenticeship or moderate training, and Later occupations require the most preparation, with a minimum of a bachelor’s degree required for entry.

### NOW OCCUPATIONS

Typically requires short-term on-the-job training, little to no experience, and/or a high school diploma

### NEXT OCCUPATIONS

Typically requires non-degree certificate, associate degree, apprenticeship, some experience, or moderate- to long-term training

### LATER OCCUPATIONS

Typically requires a bachelor’s degree or higher

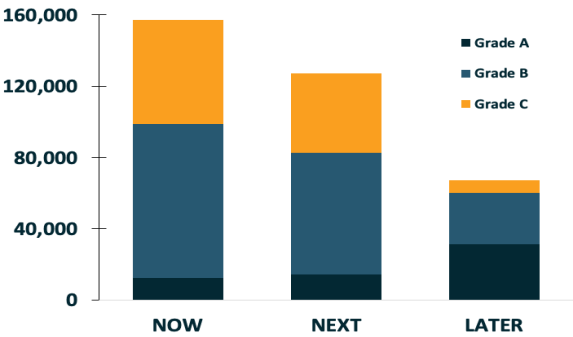
## JOB OPENINGS BY GRADE & SKILL LEVEL

In general, lower skill or entry-level jobs have more job openings. Now occupations have the most projected job openings with more than 163,000 per year between 2018 and 2028.

Later occupations have 46 percent of total openings coming from Grade A occupations. Now (7%) and Next (11%) occupations have a smaller share of Grade A openings.

Grade B openings account for 53 percent of Now and 49 percent of Next openings. Grade B openings account for 42 percent of Later total openings.

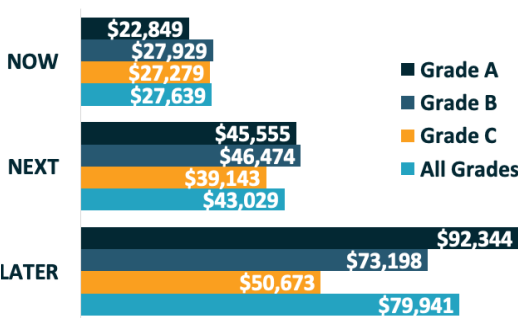
2018-2028 Annual Job Openings by Grades and Skill Level



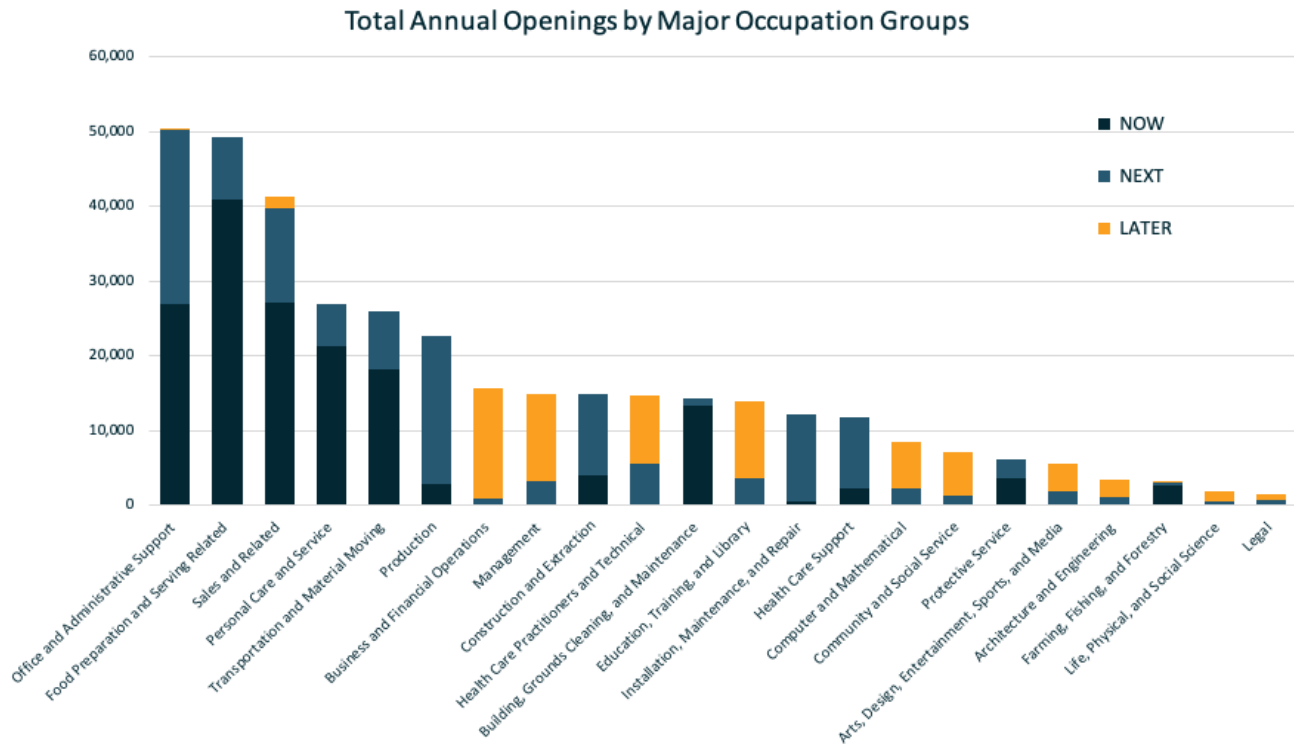
## JOB OPENINGS BY GRADE & SKILL LEVEL

Later occupations earn an average wage of \$79,941, which is 86 percent higher than the average wage for Next occupations, at \$43,029. At each skill level, higher graded occupations generally earned higher wages. Grade A Later occupations, as a group, earned the highest average wages at \$92,344.

Average Wage by Skill Level and Grade



# JOB OPENINGS BY NOW, NEXT, LATER

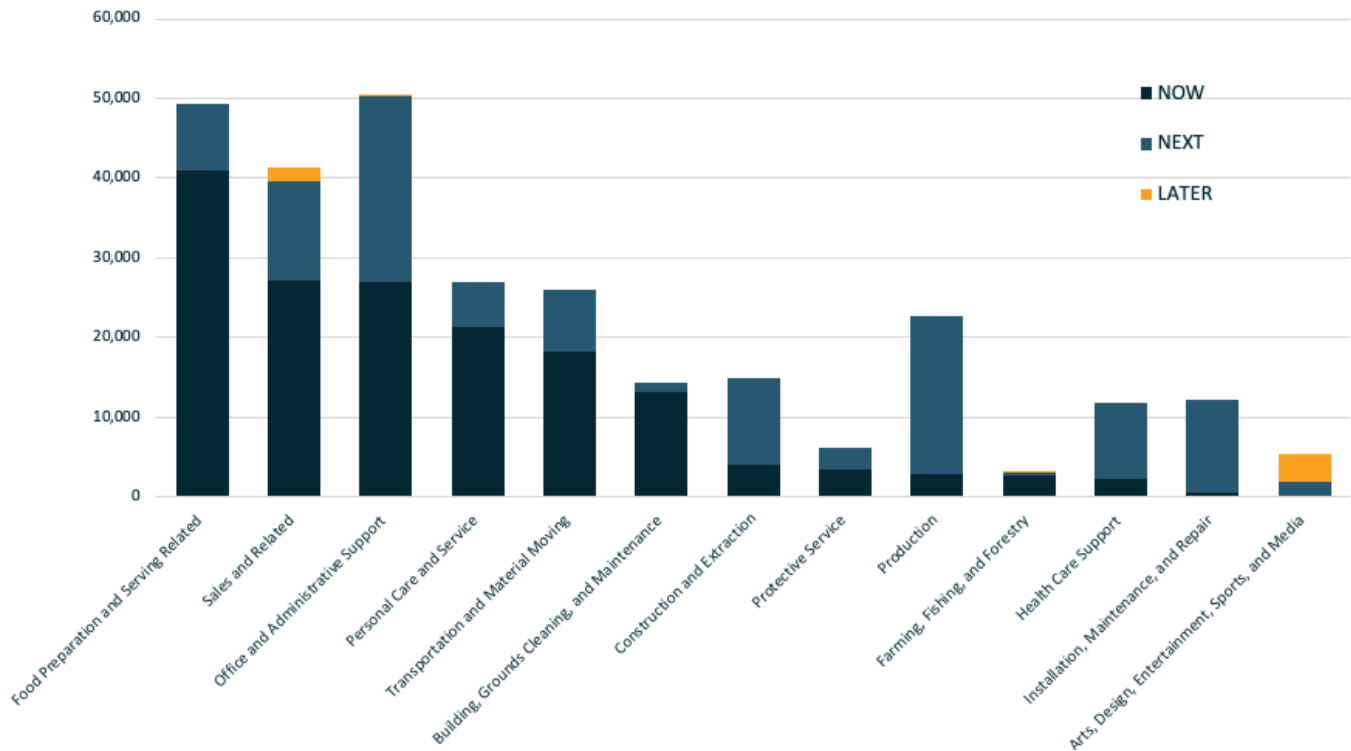


Every occupation can be grouped into one of 22 major occupation groups. There can be considerable differences among the major occupation groups in terms of the projected number of annual job openings between 2018 and 2028. The *Office and Administrative Support* occupation group is expected to have the most job openings, with more than 50,000 annual openings through 2028. The occupation groups of *Food Preparation* and *Sales* are projected to have the second and third most openings with 49,300 and 41,200 annual projected openings, respectively, between 2018 and 2028. The *Personal Care and Service* major occupation group is expected to experience a very fast growth rate of 17.2 percent between 2018 and 2028.

<i>Top Major Occupation Groups by Job Openings</i>					
Major Occupation Group	2018 Employment	2028 Employment	Net Change	Percent Growth	Annual Openings
Office and Administrative Support	450,894	437,022	-13,872	-3.1%	50,397
Food Preparation and Serving Related	264,940	286,120	21,180	8.0%	49,344
Sales and Related	296,141	294,434	-1,707	-0.6%	41,276
Personal Care and Service	150,724	176,649	25,925	17.2%	26,994
Transportation and Material Moving	197,789	207,212	9,423	4.8%	26,001
Production	206,428	198,018	-8,410	-4.1%	22,606
Business and Financial Operations	154,483	162,423	7,940	5.1%	15,638
Management	160,541	169,788	9,247	5.8%	14,889
Construction and Extraction	124,134	131,995	7,861	6.3%	14,842
Health Care Practitioners and Technical	199,747	225,872	26,125	13.1%	14,690

# NOW OPENINGS

NOW Openings by Major Occupation Groups



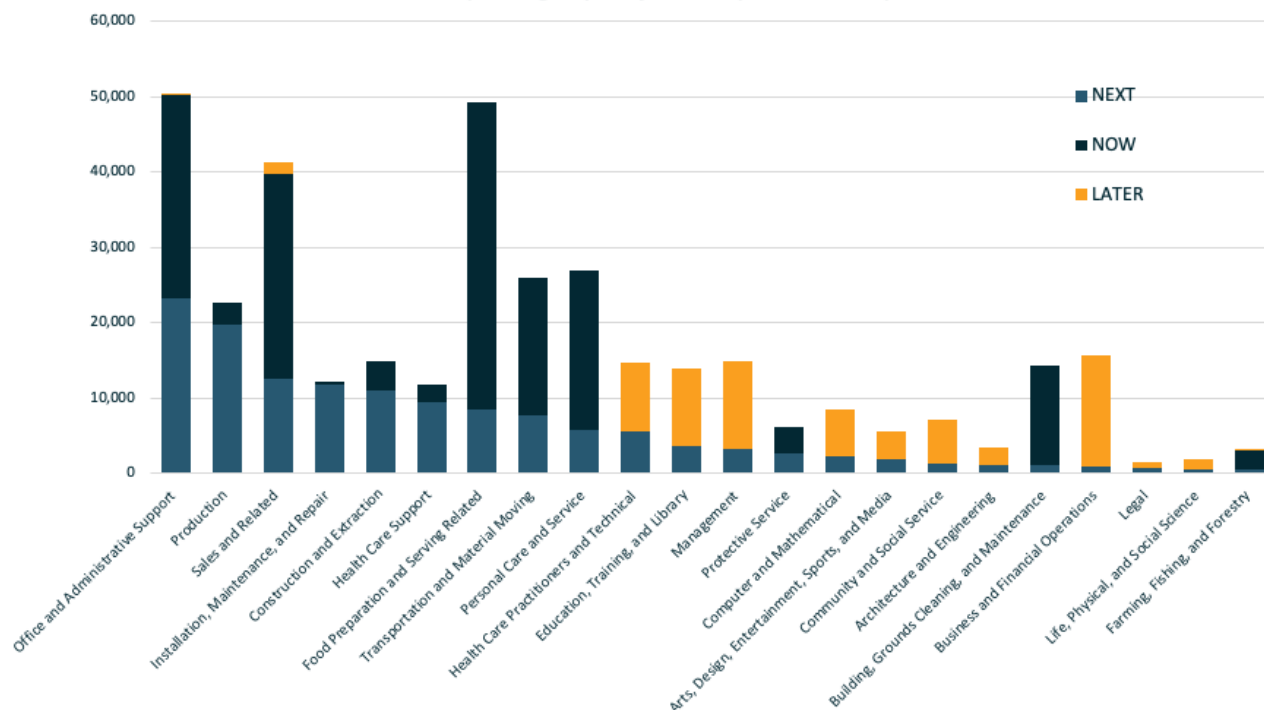
Now occupations are projected to have more than 163,000 annual job openings between 2018 and 2028, representing 45 percent of total openings over that time frame. *Food Preparation and Serving Related* occupations are projected to have the most job openings in Now occupations, with almost 41,000 openings projected each year through 2028. In addition to having a large number of job openings in Now occupations, the *Food Preparation and Serving Related* major occupation group is also expected to have a faster than average growth rate of 6.6 percent. The *Building and Grounds Cleaning and Maintenance* major occupation group has 93 percent of its openings coming from Now occupations. *Personal Care and Service* occupations are projected to have a very fast growth rate of 20.7 percent.

## Major Occupation Groups with Most NOW Job Openings

Major Occupation Group	2018 NOW Employment	2028 NOW Employment	NOW Net Change	NOW Percent Growth	NOW Annual Openings
Food Preparation and Serving Related	215,407	229,675	14,268	6.6%	40,954
Sales and Related	170,577	165,232	-5,345	-3.1%	27,088
Office and Administrative Support	226,713	221,018	-5,695	-2.5%	27,029
Personal Care and Service	112,668	135,946	23,278	20.7%	21,287
Transportation and Material Moving	132,947	139,542	6,595	5.0%	18,264
Building, Grounds Cleaning, and Maintenance	94,240	99,037	4,797	5.1%	13,234
Construction and Extraction	32,102	34,096	1,994	6.2%	3,947
Protective Service	22,486	23,308	822	3.7%	3,509
Production	21,804	21,771	-33	-0.2%	2,872
Farming, Fishing, and Forestry	15,933	16,081	148	0.9%	2,612 <sub>11</sub>

# NEXT OPENINGS

NEXT openings by Major Occupation Groups



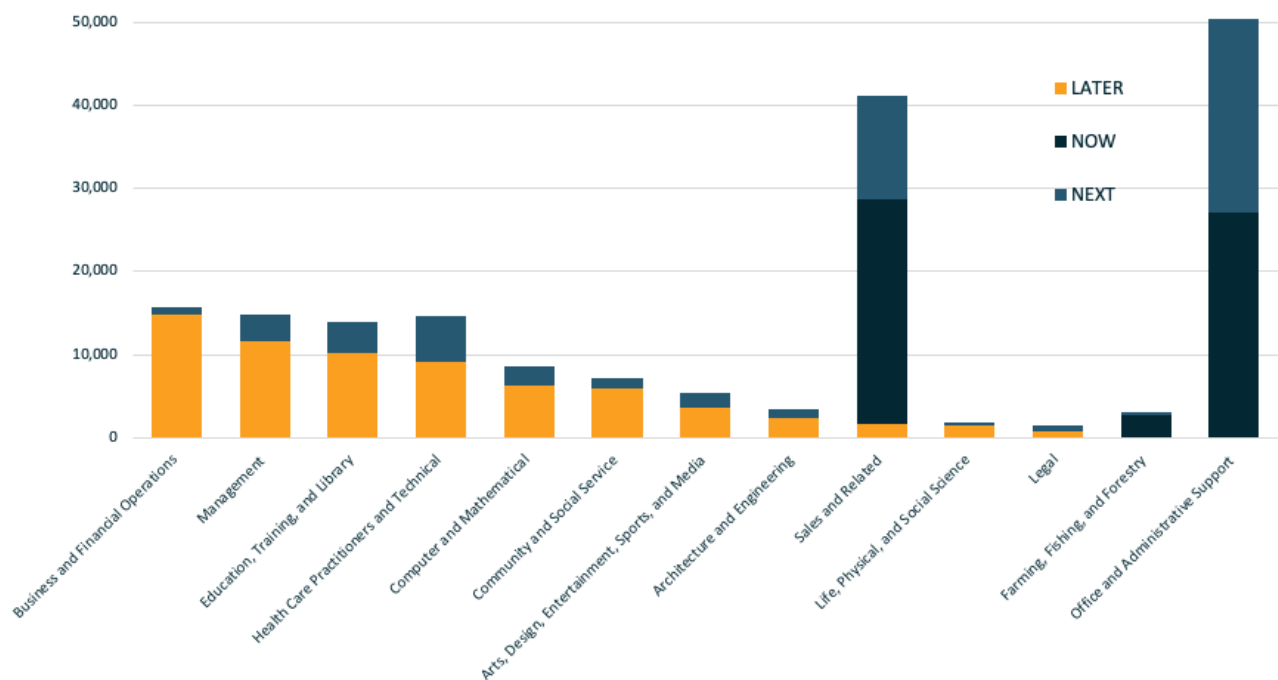
Next occupations are projected to have over 134,000 annual job openings spread across all 22 major occupation groups. The *Office and Administrative Support* major occupation group is expected to have the most Next job openings with 23,300 projected annual openings through 2028. Next occupations are heavily concentrated in the *Installation, Maintenance, and Repair* major occupation group, with 96 percent of the projected openings coming from Next openings. *Food Preparation and Serving Related* (14%) and *Health Care Support* (12.2%) occupations are projected to have high growth rates. The top two major occupation groups that are expected to have the most job openings are also projected to have declining growth rates. This shows that occupations that are expected to have negative growth are still in need of workers to fill job vacancies due to retirement or occupational transfers.

## Major Occupation Groups with Most NEXT Job Openings

Major Occupation Group	2018 NEXT Employment	2028 NEXT Employment	NEXT Net Change	NEXT Percent Growth	NEXT Annual Openings
Office and Administrative Support	223,775	215,592	-8,183	-3.7%	23,314
Production	184,624	176,247	-8,377	-4.5%	19,734
Sales and Related	110,427	113,458	3,031	2.7%	12,585
Installation, Maintenance, and Repair	115,267	118,736	3,469	3.0%	11,745
Construction and Extraction	92,032	97,899	5,867	6.4%	10,895
Health Care Support	71,223	79,937	8,714	12.2%	9,510
Food Preparation and Serving Related	49,533	56,445	6,912	14.0%	8,390
Transportation and Material Moving	64,842	67,670	2,828	4.4%	7,737
Personal Care and Service	38,056	40,703	2,647	7.0%	5,707
Health Care Practitioners and Technical	66,538	73,030	6,492	9.8%	5,549

# LATER OPENINGS

LATER Openings by Major Occupation Groups



Later occupations are projected to have more than 67,700 annual job openings. *Business and Financial Operations* occupations are projected to have 14,700 Later job openings each year through 2028, accounting for 94 percent of its total openings.








Seven of the top 10 major occupation groups with the most Later job openings are expected to have above average growth rates. The *Health Care Practitioners and Technical* major occupation group is projected to have an especially fast growth rate of 14.7 percent through 2028.

Major Occupation Groups with Most LATER Job Openings					
Major Occupation Group	2018 LATER Employment	2028 LATER Employment	LATER Net Change	LATER Percent Growth	LATER Annual Openings
Business and Financial Operations	144,390	152,460	8,070	5.6%	14,766
Management	128,074	136,686	8,612	6.7%	11,682
Education, Training, and Library	116,399	120,961	4,562	3.9%	10,178
Health Care Practitioners and Technical	133,209	152,842	19,633	14.7%	9,141
Computer and Mathematical	69,390	79,337	9,947	14.3%	6,261
Community and Social Service	50,262	55,552	5,290	10.5%	5,850
Arts, Design, Entertainment, Sports, and Media	31,191	31,955	764	2.4%	3,527
Architecture and Engineering	29,405	31,433	2,028	6.9%	2,350
Sales and Related	15,137	15,744	607	4.0%	1,603
Life, Physical, and Social Science	13,737	14,645	908	6.6%	1,424

# Top Job Outlook







## NOW Occupations

Typically require short-term on-the-job training, little to no experience, and/or a high school diploma

Grade	Title	Annual Openings	2018-2028 Growth Rate	Average Wages
B+	Combined Food Preparation and Serving Workers 	15,919	14.6%	\$21,110
A	Personal Care Aides	12,217	33.0%	\$23,020
B	Waiters and Waitresses 	9,479	3.0%	\$21,420
B	Laborers and Freight, Stock, and Material Movers 	6,985	5.3%	\$31,360
B	Customer Service Representatives 	6,723	0.3%	\$35,020
B	Janitors and Cleaners 	6,129	6.1%	\$27,470
B	Stock Clerks and Order Fillers 	5,226	3.0%	\$27,320
B	Childcare Workers	4,382	4.8%	\$23,490
B	Maids and Housekeeping Cleaners 	3,720	0.7%	\$22,640
B+	Construction Laborers	3,347	6.4%	\$47,270






## NEXT Occupations

Typically require non-degree certificate, associate degree, apprenticeship, some experience, or moderate- to long-term training

Grade	Title	Annual Openings	2018-2028 Growth Rate	Average Wages
B+	Heavy and Tractor-Trailer Truck Drivers 	5,871	4.7%	\$45,070
B	Nursing Assistants 	5,176	9.0%	\$25,930
A	Cooks, Restaurant 	4,985	18.2%	\$25,180
B+	First-Line Supervisors of Food Preparation and Serving	3,169	8.1%	\$34,010
B	Maintenance and Repair Workers 	2,990	4.4%	\$38,200
A	Sales Representatives, Wholesale and Manufacturing 	2,913	4.9%	\$65,640
B	First-Line Supervisors of Retail Sales Workers 	2,869	-2.8%	\$43,400
A	Sales Representatives, Services	2,611	6.2%	\$54,920
A	Medical Secretaries	2,408	17.2%	\$34,270
B+	First-Line Supervisors of Office and Administrative Support	2,371	-0.5%	\$57,800

## LATER Occupations

Typically require a bachelor's degree or higher

Grade	Title	Annual Openings	2018-2028 Growth Rate	Average Wages
A+	Registered Nurses 	5,525	16.2%	\$65,130
A+	General and Operations Managers 	4,613	6.2%	\$105,280
A	Accountants and Auditors 	2,866	4.9%	\$70,240
B	Secondary School Teachers	1,943	2.0%	\$54,280
B	Elementary School Teachers	1,871	1.8%	\$49,860
A+	Software Developers, Applications 	1,710	26.9%	\$93,880
A	Business Operations Specialists	1,585	6.7%	\$73,500
B+	Human Resources Specialists 	1,367	5.9%	\$62,790
A	Market Research Analysts and Marketing Specialists	1,334	17.4%	\$65,360
B+	Educational, Guidance, School, and Vocational Counselors	1,275	7.2%	\$50,900



Flame icon indicates occupations with high numbers of online job ad postings in 2019.

## Grading Scale

<i><b>Total</b></i>	<i><b>Grade</b></i>
<b>25-30</b>	<b>A+</b>
<b>22-24</b>	<b>A</b>
<b>20-21</b>	<b>B+</b>
<b>17-19</b>	<b>B</b>
<b>15-16</b>	<b>C+</b>
<b>12-14</b>	<b>C</b>
<b>9-11</b>	<b>D</b>
<b>3-8</b>	<b>F</b>

## Career Grades

Missouri's Career Grades are determined by using three statistical variables for each occupation. The three variables used are: Projected Percentage of Growth, Projected Total Openings, and Average Wage.

The Projected Percentage of Growth is determined by dividing the projected numeric growth of an occupation by its base-year employment. Projected Total Openings are the sum of an occupation's projected growth, exit, and transfer openings. An occupation's average wage is determined by using data from the Occupational Employment Statistics (OES) program.

Each variable's normal distribution, formatted as a percentage, is determined for each occupation. Each variable's percentage is then converted into a number, with a "1" corresponding to a percentage of 0 percent to 9.9 percent, and a "2" corresponding to a percentage of 10 percent to 19.9 percent, for example. Each occupation's three variable number values are then added together, creating a range from 3 to 30.

Grades are then assigned to each occupation based on this total, using the above Grading Scale.

Grades for the state and each Workforce Development Areas (WDA) are calculated independently, using only the variable data for each area to determine each occupation's grade.

## Skill Level

MERIC combines the definitions used by two reliable sources of data to classify Now, Next, and Later occupations: The Bureau of Labor Statistics (BLS) typical job requirements and O\*NET Job Zones. The BLS classifies jobs by the education or work experience required to enter an occupation, and the typical on-the-job training required to attain competency in the skills required in the job. O\*NET Job Zones indicate the level of vocational preparation needed for an occupation with a range from 1 (little or no preparation) to 5 (extensive preparation).

**Now** – Has BLS typical job requirements of high school or less, no experience, short-term or less job training, and a Job Zone of 2 or less. A Job Zone of 2 indicates that an occupation needs some preparation.

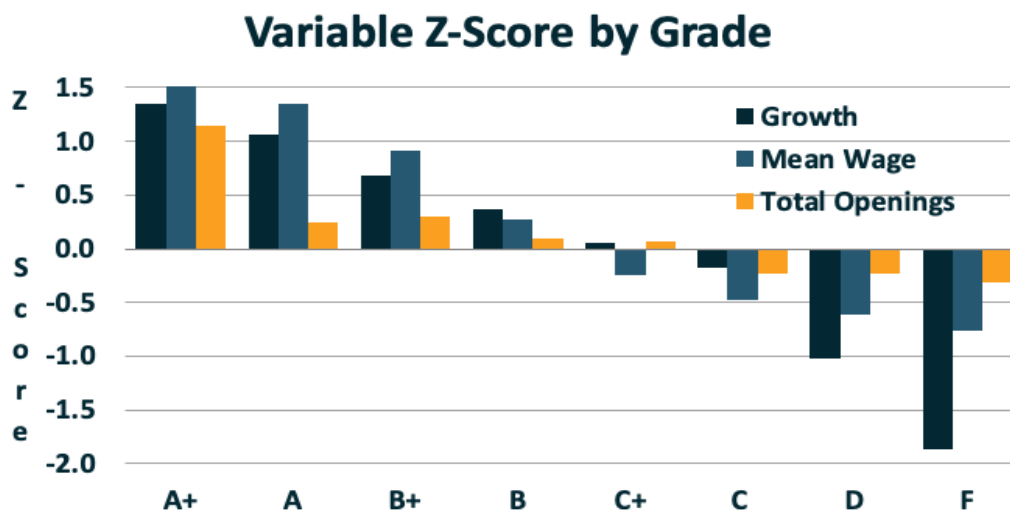
**Next** – Includes all remaining occupations after Now and Later occupations have been classified. Most Next occupations require on-the-job training of a year or more, including apprenticeships, and have Job Zones of 2 or 3. A Job Zone of 3 indicates that an occupation needs medium preparation. Next occupations at the higher end of the category require postsecondary education such as an associate degree and/or some work experience in a related occupation.

**Later** - Requires a bachelor's degree or higher.



## Variable Grade Distribution

The three variables for each occupation have a corresponding Z-Score, which represents that occupation's relationship to the group. A Z-Score of zero is equal to the group's average value. The following graph shows the variable Z-Scores by occupational grade.



	A+	A	B+	B	C+	C	D	F
Growth	1.36	1.06	0.68	0.37	0.05	-0.18	-1.02	-1.86
Mean Wage	1.62	1.35	0.91	0.28	-0.24	-0.47	-0.62	-0.76
Total Openings	1.15	0.25	0.30	0.10	0.07	-0.23	-0.23	-0.31

Data Sources: Missouri Economic Research and Information Center (MERIC) Long-Term 2018-2028 Occupational Projections; Bureau of Labor Statistics Occupational Employment Statistics (OES); Bureau of Labor Statistics typical education and training requirement categories; Labor Insight Burning Glass. Grade A, B, and C and Now, Next, Later total openings data is based on publishable data.

This workforce solution was funded by a grant awarded by the US Department of Labor's Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the US Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy continued availability or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.

<https://dhewd.mo.gov/>

<https://meric.mo.gov/workforce-research/occupational-employment-wages>

